# RAVALLI COUNTY FAIRGROUNDS Official Derby Rules 2011 HAMILTON, MT

# IF IT IS NOT SPECIFIED IN THE RULES BELOW CALL FIRST BEFORE YOU ATTEMPT IT. .JEFF - 406-369-2598

- 1. Any O.E.M. frame and body model of passenger car or station wagon except the following:
- 2. 1973 or older Chrysler Imperials or Lebarons.
- 3. NO Imperial sub Frame swaps allowed.

We reserve the right to re-inspect cars at any time before, during, or after the event, even after it has been flagged. You may be asked to cut areas of question before, during and after the derby if needed.

# WE ARE PRIVILEGED TO USE THESE FACILITIES! PLEASE TAKE EXTRA CARE IN STRIPPING YOUR CARS!

#### PREPARATION:

- All glass, plastic, and pot metal must be removed/nothing may remain in the bottom of the doors, trunks. All outside hardware must be removed (door handles, mirrors, chrome, molding, screws, fiber glass, etc.) Inner wagon panels may remain but all rear seats must be removed. (YOUR CAR WILL FAIL INSPECTION IF YOU DON NOT COMPLIES WITH THIS RULE.)
- 2. NO added weight to the car except the weld. NO packing the frames, trunks, passenger doors, or under floor decking.
- 3. Front seats must be securely mounted to the floor, and must have seat belts. All cars MUST have inner padding on driver's door.
- 4. All flammable materials inside the car must be removed except necessary safety padding and seat.
- 5. NO stadagoning is allowed. Contact head Official if you have any questions.
- 6. Your number must be at least 18 inches tall and must be painted on each side of your car.
- 7. Every car must have a 21/2 pound dry chemical fire extinguisher securely mounted inside of car within the drivers reach.
- 8. All drivers must wear a long sleeve shirt and long pants, full face helmets, eye protection and leather gloves, and neck braces are recommended.
- 9. ALL CARS MUST BE COMPLETED BEFORE BEING NSPECTED. ONCE INSPECTED YOU ARE NOT ALLOWED TO TAKE YOUR CAR BACK TO THE PITS TO WORK ON THEM.

#### **FUEL PUMPS:**

1. Externally mounted electric fuel pumps are allowed. **ON/OFF** switch must be located on the dash board so that they are easily accessible to officials. Switches must be painted in a florescent type paint making them stand out from other switches. Safety to be determined by officials.

#### TIRES:

- Any DOT tire allowed. 8 ply max. NO vulcanizing, NO double side walls, NO implement or military tires allowed. NO studded tires allowed. NO alterations to the wheels are allowed.
- 2. You may weld valve stem protectors.
- 3. Tubes may be used in tires.

# BRAKES: 1.

All cars must exhibit the ability to stop before entering the arena. If a car loses its braking ability it will be subject to disqualification. All four brakes must work.

#### **ENGINES & REAR ENDS:**

- 1. All engine and transmission combination may be used in any car, but must be mounted within 4 inches of the original motor. Must be mounted securely. You may cut a hole in the firewall to accommodate the engine within reason. However it must be covered to prevent a fire hazard.
- 2. You may cut a hole to accommodate the distributor. However it must be covered to prevent a fire hazard. If opening is larger than 8"X8". Distributor protectors are **NOT allowed.**
- 3. Holes left in the firewall more than 8"X8" from removing the dash and heater must be covered to prevent fire hazards.
- 4. **NO** holes will be allowed in the floor of the car except to accommodate the transmission shifter, fuel and transmission lines and wiring. Shifters may be tack welded or bolted. Patching holes is for safety not reinforcement, if patching rust holes you may use sheet metal only not to exceed 2 inches past rusted area. 1 relief cut may be used, length ways over transmission but must be covered.
- 5. Motor mounts may be welded; when making motor mounts to raise shift or use different motors in different cars, mounts cannot exceed original footprint of motor mount. Transmission and motors may be chained or strapped with **NO** reinforcing of the engine frame cradle NO more than ONE fastener on each side of the motor may be used. If straps are used they may only be welded, within reason, to 3 inches per side on the frame. That section that is welded to the frame may not be any thicker than ¼ inch thick and 2" wide, and **MAY NOT** extend in front of the water pump or behind the engine block no more than 4" inches.
- 6. NO after market derby accessories, except shifters and headers and steering shafts.
- 7. Stock passenger car rear ends only. Only swaps allowed are Chevy to Chevy, Ford to Ford etc..
- 8. Posi units, spools welding of gears are allowed, **NO** locker units allowed.
- 9. **NO** after market axles or slider drive shafts.
- 10. NO gear ratios lower than 3:25 allowed.

### FOR USE BELOW:

- 1. Note due to the price of metal we will use a "WITHIN REASON" clause; however if you push it we will make you cut it.
- 2. Only 3/8" round hot, cold or rebar, or 1"X3/16" flat strap may be used for seam welding.
- 3. Chain must be no larger the 3/8" when chaining.
- 4. #9 wires may be used in place of chain only and only 4 strands may be twisted together.

#### SECURING:

- 1. Only bolts no bigger then 3/8"X2" may be used around any hood cut out openings. Must be spaced 12" apart and no more than 2"inches from the cut out opening. NO zip screws can be used anymore.
- 2. The tailgate of a station wagon will be treated as a trunk. #9 wire may only be used in place of chain were chaining is allowed.
- 3. Engine hood may be chained, bolted, or welded, 6-1"inch or smaller bolts or 6-3/8" inch chains, welds are 4"inch welds 4" inches apart. Hood must have a minimum of 30"X30" opening around air cleaner in case of fire.

4. Trunk may be secured with welds or chains or wired, if welded; welds may be 4"inches in length, spaced 4"inches apart, wires must be 4"inches apart. Chains will be 3/8"inch max. diameter. With no more than 8 chain loops used with none around the frame.

#### DOORS AND WINDOWS:

- 1. Doors may be stitched welded only 4"inch welds, 4"inches apart, you may chain with 3/8" inch chain or use #9 wires, at least twice per seem. If chaining or wiring, none may go through or around the frame.
- 2. A protective bar must be placed inside or outside on the driver's and passenger's front door. It can not extend more than 6"inches past the driver's door seam on either side. If inside it must be securely welded and bolted, if outside it must have minimum of 3-1"inch or larger bolts with minimum 4"inch backing plates and securely welded on each end. **DRIVERS DOOR MUST BE PAINTED WHITE.**
- 3. NO window openings may be snaked through quarter panels to the roof with chain, cable, or wire.
- 4. One or two bars running from the roof down to the cowl or front dashboard bar is **MANDATORY. NO** more than two bars may be used and bars can not exceed 2" inches in diameter and be welded no more than 3"inches onto the sheet metal.
- 5. On four door cars without posts you may add a chain or a bar from the top center of the doors to the roof.
- 6. You must have a screen over driver's side front window. Screen must be expanded metal with ½" inch squares max. and must be attached to drivers side windshield post and windshield bar.
- 7. Out side door bars must be channel type material 6" inch min. width, 10"inch max. NO grader blades or guardrail type material. All bars inside or outside must have all sharp edges grinded OFF. This is a safety issue.

#### INTERIOR BARS:

- 1. All interior bars must be a minimum of 2" outside diameter maximum 4"inch outside diameter. End plates are **MANDATORY** on all bars and must be welded in place **NO** bolting allowed.
- 2. Pipes can not be fence, galvanized, exhaust style of pipe/tubing.
- 3. A bar behind the seat is **MANDATORY**. It must be located **NO** more than 6"inches from the final resting position of your seat and must have 6"X6"X1/4"inch end plates.
- 4. A minimum of one upright post or roll loop, or halo must be used. It must be attached to the floor, (NOT FRAME), roof and seat bar. Located behind the driver's seat. It may be welded or bolted to the floor and roof. This is for safety so please make sure it is welded adequately or bolted.
- 5. A bar must be put in the front where the dashboard was located, in between the front end of the inside door bars and must hold door bars against door posts.
- 6. You may weld a connecting bar on the inside of the driver's and passenger door only from front bar to the rear bar creating in essence a box.
- 7. All bars and posts in the proximity of the head must be padded.
- 8. OVERALL SAFETY WILL BE DETERMINED BY THE OFFICIALS AT TIME OF INPSECTION.

#### WELDING:

- 1. NO inner seam welding or alterations to strengthen the frame or uni-body is allowed other than what is specified.
  - A. Exception is the inner rear panels of a wagon. They may be secured by **FOUR** 4"inch welds and a min. of a 15"inch inspection hole must be made.
  - 3. You may weld the floor pan seam under the gas and brake pedal only for safety, **NO** filler may be used.
- 2. A seam is defined as two original exterior body to body lines on the doors hood and trunk. NO other seams or created seams may be welded other than on rule door window; rule #6.
  - A. A seam runs from one corner to another, and is not continuous.
  - B. The tailgate of a station wagon will be treated as trunk.
- 3. NO painting or undercoating may be used underneath the car. Frames must be clean of dirt.
- 4. Drivers may use two pieces of 1"inch ready bolt to secure the trunk by placing the ready bolt through the trunk lid and trunk floor, through the frame or unibody.

#### **BUMPERS:**

The intention of this rule is to allow you to mount the bumper in such a way that it will not fall off. Upon inspection if it is determined that you have exceeded the intention of the rule you will be disqualified.

- 1. Stock O.E.M. bumpers of passenger cars must be used.
- Bumpers may be cut so they do not smash into the tires during the event. Chrome may be welded to the inner bumper box to keep it from separating. 10-1"inch spot welds only.
- 3. Bumpers may be flipped.
- 4. Bumpers may be welded to the brackets and the brackets to the frames, NO welding bumpers to frames.
- 5. Only one bumper bracket per frame rail may be welded to the frame, and can be welded and /or bolted. **NO** more than 10"inches from the front of the frame. If mounted to excess you maybe asked to cut it.
- 6. If swapping bumper and brackets:
  - A. You may only use the mounting hardware that was on the car originally or one style of car bracket hardware and a car bumper. All other hardware must be removed. (ex. Chrysler bumper with GM shock brackets on a Ford).
  - B. Shock tube will be considered the bracket if disassembled from the mounting hardware. If this is done then rule #5 applies.
  - C. Mounting brackets may not be attached to the Cordoba type sub or K-frame in any way.
- 7. Compression bumper shock tubes may be compressed and welded.
- 8. **NO** material may be added other then the weld.
- 9. **NO** chrome may be welded to the body on compression bumpers whether it is using the mounting hardware or not. Non-compression bumpers may weld ORIGINAL bumpers to the body.
- 10. **NO** welding of any kind other than what is specified is allowed on the bumper.

#### FRAME:

- 1. THERE IS NO WELDING OF OR TO THE FRAME OR UNI-BODY ALLOWED OTHER THAN what is specified in the bumpers section #5 and radiator rule #4 and engine rule #5 or pre run section.
- 2. If you cut the frame for pre-bending purpose, you may not weld the cut back together.
- 3. All body mounts (rubber biscuit and cone) and "pucks" must be in place. You may not remove bolts and place washers on both sides.
- 4. You may use 2-3/4" bolts with max. 2"inch diameter washers. 1 bolt per outside frame rail, to attach body to frame.
- 5. NO buffing, grinding, or packing of frames. NO welding to frame seams or welding metal inside frame or plating of outside of frame, exception is pre-run cars.

## RADIATORS AND RADIATOR SUPPORTS:

- 1. Radiators must stay close to stock position in front of the motor. **NO** added water capacity.
- Engine coolants are NOT ALLOWED water only.
- 8. NO more than 2 bolts may go thru the hood at radiator support. Bolts may go from hood to frame or through frame, located, NO more than 1"inch in front or behind core support and no larger than 1"inch diameter washer on hood may not be no larger than 3"inches in diameter and may be welded to hood.
- 4. Lower radiator support body mount bushings may be removed and replaced with a max. 1"inch diameter bolt and max. 4"inches in length.
- 5. Radiator support may not be welded to the frame, bumper, bumper brackets or anything else.

#### TRANSMISSION COOLERS:

- 1. Transmission coolers will be allowed. Must use metal lines inside of car.
- 2. Proper hydraulic; metal or high pressure rubber line may be used.
- 3. Condenser must be enclosed or covered.
- 4. OVERALL SAFETY WILL BE DETERMINED BY THE OFFICIAL'S AT TIME OF INSPECTION.

#### **GAS TANKS:**

- 1. Original gas tanks must be removed from the car.
- You must have your gas tank securely mounted inside the car with a minimum of two fasteners, behind the driver's seat and covered. Seat belts or "pull" type straps, or plumbers tape may NOT be used.
- 3. A maximum size of 6.5 gallons can be used.
- 4. A marine type tank or fuel cell must be used. **NO** plastic gas cans, will not be allowed unless they are mounted within a four sided metal tank protector. (call for clarification)
- 5. Fuel lines must run inside car and must be metal. Original gas line inside frame can **NOT** be used.
- 6. OVERALL SAFETY WILL BE DETERMINED BY OFFICIALS AT TIME OF INSPECTION.

#### AIR CLEANERS:

- 1. You must have an air cleaner over the carburetor all times during the event.
- 2. NO starting fluid or starting aid will be allowed.
- 3. There must be a minimum of 30"X30" inch square opening cut around the air cleaner in case of a fire.
- 4. OVERALL SAFETY WILL BE DETERMINED BY OFFICIALS AT TIME OF INSPECTION.

#### **CUTOUTS:**

- 1. Cutouts over the wheel wells are legal.
- 2. Cutouts may be folded if cut outs are folded you may be asked to cut an inspection hole in them.
- 3. Only 3-3/8"inch bolts with 1"inch fender washers, directly over the fenders may be used.
- 4. **NO** welding of the cutouts is allowed.
- 5. You must have 2 holes cut in the trunk lid for inspection. Minimum of 8"inch in diameter unless tail light holes are big enough.
- 6. If inspection holes and fire holes are determined to be too small you will be asked to cut them larger.
- 7. **NO** folding of hood more than 4"inches over core support.
- 8. **NO** folding of front fenders more than 4"inches towards core support.

#### TRAILER HITCHES:

1. Trailer hitches and frame work after market or not must be removed.

#### SUSPENSION:

- 1. You must have a working suspension. (NO pulling shocks and putting pipes in their place).
- 2. NO other means other than tires and spring spacers may be used to raise the cars suspension. Cars must have a max. ground clearance of 30"inches from the top of the bumper to the ground.
- 3. **NO** adding reinforcements to the suspension.
- 4. **NO** putting leaf springs on top of the axle. NO more than 7 leafs are allowed.
- 5. You may weld coil springs to the frame and axle so they do not fall out (**NO** filler may be used).
- 6. You may not clamp the shocks. You may put 3 C-style clamps with a single bolt in each clamp per leaf pack.
- 7. Suspension must be stock that came on the car. Except for engine/rear end rule #7.

#### **RULES FOR PREVIOUSLY RUN CARS:**

The following rules apply to previously run derby cars only. The intention of these rules is to help you make your pre-run car competitive with fresh cars. The idea is to repair damaged areas only and return the car to as close to "stock" condition as possible. This is not an opportunity to plate or reinforce your car! If we feel that you have pushed the limits of these guidelines, you will not be able to compete! Inspection officials will use discretion and all decisions will be final. Call and ask before you fix something that is not outlined in this section. Absolutely **NO ADDED METAL** other than what is specified below!

- GENERAL: You may make any change or modification that complies with the full set of general rules. (Add all-thread, strap, and bolts; weld doors, etc...
  if the car was previously run somewhere that does not allow these things.) There are certain rules and items that are MANDATORY for this show, so
  make sure you read the rules completely. Call if you have any questions. Keep in mind that you make have to cut welds, bolts and/or make other
  modifications to be in compliance with the rules.
- 2. **SAFETY:** You may patch any hole in the doors or floor of the car for SAFETY **ONLY**. You must use sheet metal only, and your patch may only be 2"inch larger than the hole you are patching. Safety will be determined by inspection officials at the time of inspection.
- 3. **FRAME REPAIRS:** Pre-run cars are allowed to repair damaged areas of the frame on the front and rear of the car (4 total repairs on the car max.) You may use one patch that is 6"X4"x1/8" thick max. plate for each repair. The patch may only be placed on the part of the frame that is damaged. There must be a clear sign of damage from a previous derby. (tear, crack, or extreme bend). This will be reviewed by the officials at the time of inspection. The patch must be placed FLAT on the top, bottom, inside or outside rail. It **MAY NOT** be welded and folded over from one side to the other. Patch may **NOT** be welded to any other patch or ANY other part of the car. Body, bumper, bumper brackets, core support, inner fender, all thread etc. Patch may be welded only! **NO BOLTS**; **NO** other frame welding will be allowed! All other repairs made to the frame will be cut and or removed.

IF YOU HAVE OTHER PRE-RUN QUESTIONS, CALL FIRST BEFORE YOU FIX IT.

Jeff Carter - 369-2598